WHAT IS CLAIMED IS:

1. A scanning exposure apparatus comprising:

a stage unit which supports and moves a substrate; and

a control unit which starts exposing the substrate after a start of a second section in an acceleration section of said stage unit sequentially including a first section in which a jerk is positive, the second section in which a jerk is 0, and a third section in which a jerk is negative.

2. An apparatus according to claim 1, wherein a time ratio of the first section and the second section is set to 3 : 2.

3. An apparatus according to claim 1, wherein a time ratio of the first section, the second section, and the third section is set to 3 : 2 : 3.

4. An apparatus according to claim 1, wherein the first section and the third section are set to uniform-jerk sections.

5. An apparatus according to claim 3, wherein the first section and the third section are set to uniform-jerk sections.

6. An apparatus according to claim 5, wherein said control unit starts exposing the substrate after said stage unit is accelerated to a velocity which is over 30% of a final velocity in the acceleration section.

7. An apparatus according to claim 1, wherein a

uniform-velocity section of said stage unit follows the acceleration section.

8. A scanning exposure apparatus comprising:

a stage unit which supports and moves a substrate; and

a control unit which ends exposing the substrate before an end of a five section in a deceleration section of said stage unit sequentially including a fourth section in which a jerk is negative, the fifth section in which a jerk is 0, and a sixth section in which a jerk is positive.

9. An apparatus according to claim 8, wherein a time ratio of the fifth section and the sixth section is set to 2 : 3.

10. An apparatus according to claim 8, wherein a time ratio of the fourth section, the fifth section, and the sixth section is set to 3 : 2 : 3.

11. An apparatus according to claim 8, wherein the fourth section and the sixth section are set to uniform-jerk sections.

12. An apparatus according to claim 10, wherein the fourth section and the sixth section are set to uniform-jerk sections.

13. An apparatus according to claim 12, wherein said control unit ends exposing the substrate before said stage unit is decelerated to a velocity which is 30% of an initial velocity in the deceleration section.

14. An apparatus according to claim 8, wherein a uniform-velocity section of said stage unit precedes the deceleration section.

15. A scanning exposure method of exposing a substrate while moving a stage which supports the substrate, comprising steps of:

moving the stage in accordance with a profile of an acceleration section of the stage sequentially including a first section in which a jerk is positive, a second section in which a jerk is 0, and a third section in which a jerk is negative; and

starting exposing the substrate after a start of the second section in the acceleration section.

16. A scanning exposure method of exposing a substrate while moving a stage which supports the substrate, comprising steps of:

moving the stage in accordance with a profile of a deceleration section of the stage sequentially including a fourth section in which a jerk is negative, a fifth section in which a jerk is 0, and a sixth section in which a jerk is positive; and

ending exposing the substrate before an end of the five section in the deceleration section.

17. A device manufacturing method comprising a step of exposing a substrate to a pattern using a scanning exposure apparatus defined in claim 1.

18. A device manufacturing method comprising a step

of exposing a substrate to a pattern using a scanning exposure apparatus defined in claim 8.